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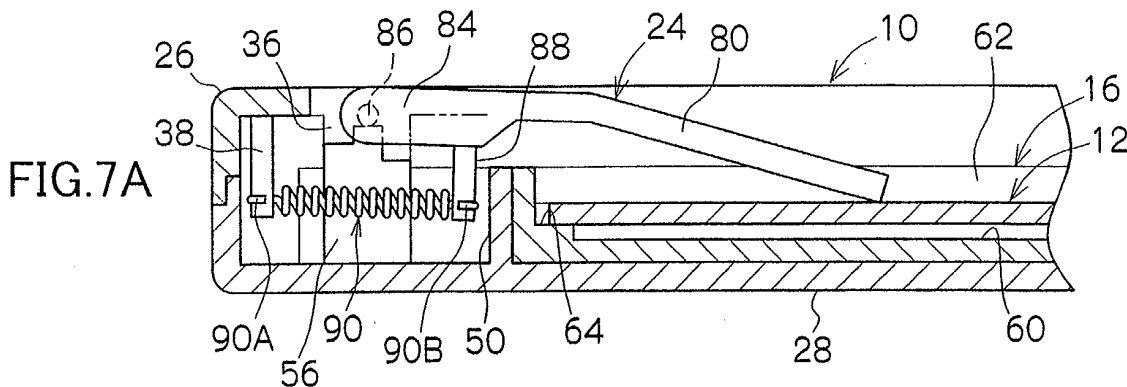
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(54) **Disk cartridge**

(57) A disk cartridge includes: a disk medium on one face of which a recording surface is formed and on the other face of which a non-recording surface is formed; a casing having a disk opening which allows removal of the disk medium, exposing the non-recording surface, and an opening which allows access to the recording surface, being opened and closed by a shutter member;

and a disk holder which is rotatably provided in the casing, and which presses and holds the non-recording surface when the disk medium is in storage, and is separated from the non-recording surface when the disk medium is in operation and when taken out, the disk holder being configured such that it will not protrude over the top surface of the casing, when viewed from the side, except when the disk medium is to be taken out.





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# EUROPEAN SEARCH REPORT

Application Number  
EP 05 25 1418

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
P,X	EP 1 474 801 A (MATSUSHITA ELECTRIC IND CO LTD [JP]; SONY CORP [JP]) 10 November 2004 (2004-11-10)	1-7, 12-16	INV. G11B23/03
P,A	* paragraph [0015] - paragraph [0020] *	8-10	
	* paragraph [0027] - paragraph [0028] *		
	* paragraph [0044] - paragraph [0045] *		
D,X	& JP 2003 242710 A (MATSUSHITA ELECTRIC IND CO LTD) 29 August 2003 (2003-08-29)	1-7, 12-16	
A	* abstract *	8-10, 17-20	
	-----		
X	JP 2003 228948 A (MATSUSHITA ELECTRIC IND CO LTD) 15 August 2003 (2003-08-15)	17-20	
A	* abstract; figures 1-7,15-18,24-31,40,41 *	1-7	
	& US 2005/018333 A1 (OKAZAWA HIRONORI [JP] ET AL) 27 January 2005 (2005-01-27)		
	* paragraph [0181] - paragraph [0186]; figures 3-7 *		
	* paragraph [0209] - paragraph [0218]; figures 15-18 *		
	* paragraph [0247] - paragraph [0256]; figures 24-31 *		
	* paragraph [0288] - paragraph [0290]; figures 40,41 *		
	-----		
A	WO 03/041076 A (MATSUSHITA ELECTRIC IND CO LTD [JP]; OKAZAWA HIRONORI [JP]; TAKIZAWA T) 15 May 2003 (2003-05-15)	1-10	
	* page 185, line 15 - page 190, line 1; figure 104 *		
	* page 210, line 15 - page 225, line 8; figures 119-131 *		
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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		14 April 2008	Pariset, Nadia
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone		T : theory or principle underlying the invention	
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A : technological background		D : document cited in the application	
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P : intermediate document		& : member of the same patent family, corresponding document	

6  
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Office

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Application Number  
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	WO 03/079356 A (SAMSUNG ELECTRONICS CO LTD [KR]; MATSUSHITA ELECTRIC IND CO LTD [JP]) 25 September 2003 (2003-09-25) * page 6, line 18 - page 7, line 9 * * page 9, line 13 - page 10, line 14 * * figures 3-5B *	1-7	
D,A	JP 2003 115184 A (SONY CORP) 18 April 2003 (2003-04-18) * abstract *	1-7	
E	WO 2005/027126 A (LG ELECTRONICS INC [KR]; KANG SEONG-TAEK [KR]; YOO SEUNG-HON [KR]; KIM) 24 March 2005 (2005-03-24) * paragraph [0055] - paragraph [0082]; figures 5-8 *	8-10, 17-20	
E	WO 2005/027129 A (LG ELECTRONICS INC [KR]; KIM JIN YONG [KR]; PARK KYUNG CHAN [KR]; LIM) 24 March 2005 (2005-03-24) * paragraph [0081] - paragraph [0089]; figures 9a-10 * * paragraph [0095] - paragraph [0097]; figures 13a-b *	17-20	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
Place of search		Date of completion of the search	Examiner
The Hague		14 April 2008	Pariset, Nadia
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

6  
EPO FORM 1503 03.82 (P04C01)



European Patent  
Office

Application Number

EP 05 25 1418

### CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☒ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:
- ☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-7

Disk cartridge comprising a casing with a disk opening which allows the removal of the disk and a disk holder to maintain the disk within the casing, wherein the disk holder is configured such that it will not protrude over the top surface of the casing, when viewed from the side, except when the disk medium is to be taken out.

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2. claims: 8-11

Disk cartridge comprising a casing with a disk opening which allows the removal of the disk and a disk holder to maintain the disk within the casing, wherein the disk holder comprises protrusions that abut the non-recording surface of the disk medium when the disk holder is deflected from the inner surface of the disk holder.

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3. claims: 12-16

Disk cartridge comprising a casing with a disk opening which allows the removal of the disk and a disk holder to maintain the disk within the casing, wherein the disk cartridge comprises:

a first retaining protrusion which protrudes from the inner surface of the disk holder in front of the rotation axis of the disk holder in the casing;  
a second retaining protrusion which protrudes from the inner surface of the upper shell behind the rotation axis of the disk holder except on an imaginary line which passes through the first retaining protrusion and is orthogonalized with the rotation axis; and  
an urging mechanism which is stretched between the first retaining protrusion and the second retaining protrusion such that the urging mechanism is positioned under the rotation axis, when viewed from the side, when the disk medium is in storage, and is positioned above, when viewed from the side, said rotation axis when the disk medium is taken out.

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4. claims: 17-20

Disk cartridge comprising a casing with a disk opening which allows the removal of the disk and a disk holder to maintain the disk within the casing, wherein the disk holder is provided in the rear portion of the casing and presses the outer peripheral edge portion in the rear portion of the disk medium toward the front side of the disk cartridge.

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 05 25 1418

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
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14-04-2008

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1474801 A	10-11-2004	AT 361527 T	15-05-2007
		AU 2003245123 A1	04-09-2003
		BR 0303085 A	15-06-2004
		CA 2438299 A1	21-08-2003
		CN 1496567 A	12-05-2004
		DE 60313581 T2	30-08-2007
		WO 03069620 A1	21-08-2003
		JP 2003242740 A	29-08-2003
		MX PA03009413 A	29-01-2004
		PL 363154 A1	15-11-2004
		TW 265485 B	01-11-2006
		US 2004205809 A1	14-10-2004
JP 2003242710 A	29-08-2003	JP 3973443 B2	12-09-2007
JP 2003228948 A	15-08-2003	NONE	
US 2005018333 A1	27-01-2005	AU 2003208612 A1	22-09-2003
		BR 0303364 A	30-03-2004
		CA 2458245 A1	18-09-2003
		CN 1545706 A	10-11-2004
		EP 1440442 A2	28-07-2004
		WO 03077252 A2	18-09-2003
		JP 3891906 B2	14-03-2007
		JP 2004094996 A	25-03-2004
		MX PA04000373 A	23-07-2004
WO 03041076 A	15-05-2003	BR 0206265 A	23-12-2003
		CN 1486494 A	31-03-2004
		DE 60220697 T2	04-10-2007
		EP 1442460 A1	04-08-2004
		JP 3891984 B2	14-03-2007
		JP 2005509239 T	07-04-2005
		KR 20060064029 A	12-06-2006
		US 2004052204 A1	18-03-2004
WO 03079356 A	25-09-2003	AU 2003208041 A1	29-09-2003
		CA 2479851 A1	25-09-2003
		CN 1656558 A	17-08-2005
		EP 1485916 A1	15-12-2004
		JP 2005521187 T	14-07-2005
		MX PA04008998 A	26-11-2004
		RU 2282255 C2	20-08-2006
		TW 244072 B	21-11-2005
		US 2003235144 A1	25-12-2003

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 05 25 1418

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

14-04-2008

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 2003115184	A	18-04-2003	NONE	
-----				
WO 2005027126	A	24-03-2005	BR PI0414380 A	21-11-2006
			US 2005060737 A1	17-03-2005
-----				
WO 2005027129	A	24-03-2005	EP 1668644 A1	14-06-2006
			US 2005097592 A1	05-05-2005
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